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The Ross Farm Story

J. Lynton Martin

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The Ross Farm Story

The Ross Farm Story is really the story of most of rural Nova Scotia. Minor details may vary according to the origin of the settlers, their time of arrival, and environmental differences, but the major events are the same. They clearly illustrate the conflict between the natural resources of the province and the changing values in a developing human society.

The geological structure of Nova Scotia resulted in the development of two major land types: lowlands in the areas where soft rocks occurred, and uplands in the hard rock regions. The lowlands, such as the Annapolis Valley, constitute our best agricultural lands, while the uplands which make up most of the province feature rough forested lands with small, disconnected patches of tillable soil, averaging about 20 acres in size.

Many of us look at the small upland farms today, and wonder why the settlers ever attempted to clear them, thinking that it would have been better to have left them in forest. We forget that these people had a tremendous thirst for land of their own and independence. We forget that until after 1850 practically all farm work was done by hand, or with very primitive ox-drawn implements. Twenty acres was a large piece of land to a man with nothing but an axe and a hoe.We should also realize that most farm operations were designed primarily to feed and clothe the family, and relatively small surpluses from farm and forest were sufficient to provide the additional needs of the time.

The small upland farm provided a good life for most of Nova Scotia's population for a number of generations. It provided an excellent environment for the development of sturdy, independent, intelligent and extremely versatile people. People who had grown up close to nature, and who having had to think for themselves, often developed a most valuable philosophical turn of mind. The small upland farm produced many people who made their mark throughout the world, and played an important part in the development of our culture. We have yet to learn if our modern urban-based society and our advanced educational system can do as well.

It Began in 1816

Lord Dalhousie was Governor of Nova Scotia. He was deeply interested in agriculture and was convinced that settlements should be established in the forested interior of the province. He persuaded William Ross, a native of County Cork in Ireland, and a lieutenant in the 16th Regiment of Infantry, to accept a captaincy in the Nova Scotia Fencibles, and to undertake the settlement of the remnants of the latter regiment on the lands of Sherbrooke (later called New Ross).

In August, 1816, Captain Ross, his wife Mary and five children, and 172 disbanded soldiers established this settlement. Captain Ross acted as Deputy Surveyor and laid out the lots for his men. He built a small log house overlooking Lake Lawson, and the following year, with axe and whip saw, he built the frame house which still stands. He named his new home Rosebank.

The government provided rations of food and rum to the new settlers, and tools were divided as follows:

— one axe, one hoe, and one whip saw for every man, one hand saw, chisel, draw knife and auger for every five men, and a fair proportion of nails, hammers, gimlets and spades for all.

— seed potatoes, turnip seed, red and white clover seed, shovels, garden rakes, Dutch bake ovens, fishing nets, rope, lead, cork, trout hooks, twine, wax and thread.

English Felling Axe

Cant Hook

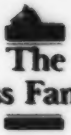
Common Hoe

Burnt Land Hoe

German Claw Hoe

Rations for the first settlers were discontinued in 1818, and for later comers in 1820. By this time, many of the people had abandoned their lands and left the district, but those who remained became firmly established on the land.

Captain Ross did not live long to enjoy the fruits of his labors. In the fall of 1821, he attempted to blaze a route for a proposed road to Halifax. He was overtaken by a severe storm, became gravely ill, and died in Halifax on May 2, 1822. Mary Ross was left with seven young children to face life in a raw pioneer settlement. The problems she and her family faced were similar to those experienced by many throughout the rural areas of Nova Scotia, but while most of these have disappeared forever into the mists of time, the day to day life of the Ross family was faithfully recorded in the journals of the fourth son, Edward J. Ross. We have drawn freely from them as well as from many other sources to compile this book.



The Ross Family

In 1835, William Ross, the eldest son, was married and lived at home. He was responsible for the operation of a saw and grist mill, but he helped out on the farm when required and the other boys helped him in the mill at peak periods. After 1850, William left home and settled in Cornwallis.

The second son, Irlam, is presumed to have died by this time, and George, the third son, was primarily responsible for the farm operations. However, in stormy weather and during slack times, George served as the community shoemaker, having learned his trade from Jacob Hiltz of the nearby Forties Settlement. George was educated at King's College School in Windsor, and in later years was Captain of Militia, Justice of the Peace, and a leader in the community.

The next son, Edward, helped George on the farm, did William's bookkeeping for the mill, and operated a small store with supplies he brought in from Halifax. He also bought cattle, butter, hay, barrels and other produce of the district and sold it in Chester, Lunenburg and Halifax. He, too, probably attended King's College School, he became a Justice of the Peace in 1838, collected county rates, paid pensioners, and controlled statute labor. After 1850, Edward left New Ross and set up an import business in Boston. He later returned to Nova Scotia and served as Justice of the Peace in Kentville until his death in New Ross in 1894.

Lawson, the fourth son, worked at home until 1835, but then left for St. Martin's in New Brunswick. After several years there, he went on to Boston where he remained until he died. The youngest son, James, helped his brothers on the farm, and Mary, the eldest child, married Andrew Kiens, a son of John Kiens, the former Quartermaster of the 5th Battalion, 16th Regiment, and she went to live on the Kiens farm across Lake Lawson.

George Ross had eight children: Albert, Lizzie, Harold, Harvie, Ralph, Ethel, Ellen and Emily. Harold Ross fought in the 1885 Rebellion with the North West Mounted Police and remained in Saskatchewan. Harvie married Eva Ross of Kentville, and Ralph married and settled in British Columbia. Ethel married the Rev. Charles White of Shelburne, and Ellen

married a Rev. Smith. Emily married Dr. Mark Rogers from the Boston area, and they lived in Baltimore, Maryland.

Rosebank Farm passed from George to Albert Ross in 1895, and from him to his sister Lizzie, in 1950. Neither Albert nor Lizzie married, and when Lizzie died the property was passed on to a grandnephew, Mark White. Mark White died in 1963, and in 1970 the property was transferred to the Province of Nova Scotia through the New Ross District Museum Society and the Nova Scotia Museum by his widow, Mrs. Mark White.

Pioneer Housing

When many of us think of pioneer housing we think of log cabins. Actually, this was the case in parts of Ontario and the United States, but the log cabin did not play a major part in the settlement of Nova Scotia. It was more common in the second and third generations than it was in the first.

However, some early French settlers did build houses "en piquet", that is, they built them of logs used vertically as "pickets". Others built their houses of sawn planks and timbers. In some cases the roofs were thatched. The horizontally-laid log cabin was first introduced to the United States by Scandinavian settlers in the mid-17th century. The Acadians probably learned the technique from them since it was not until at least the mid-18th century that young Acadian couples sometimes built this kind of log house as their first home.

When the Germans settled in Lunenburg, they too built some shelters with poles standing on end, but others were built of sawn lumber provided by the government or purchased from Yankee traders. Within a year, the Germans had five sawmills of their own in operation. In later years, the first settlers of some of the more remote districts also built huts of logs, but they were usually of a temporary nature and replaced by frame structures within a year or two.

Many of the New England settlers took their houses apart, loaded them on their vessels and brought them with them. Some lived in tents until they were able to re-erect their

homes. In Sydney, Governor Parr burned the forests to get them out of the way, and he provided new settlers with lumber to build their first homes.

Captain Ross built a log hut for his family in 1816, and the following year he built Rosebank Cottage which remains with us today. We can imagine that while clearing his land, he probably set aside the best trees for his house, and used every opportunity to hew the logs square, or rip them into planks with a pit saw.

Most early homes were built with a timber frame. The main supporting timbers were hewn to shape, cut to the proper length, mortised and tenoned, and then put together with wooden pegs. The outside was then covered with boards or planks, they in turn were covered with birch bark and then shingled with hand-made pine or spruce shingles. Some of the early settlers built thatched roofs, and others substituted shakes for shingles.

Rosebank Cottage is different from the usual timber frame dwelling, but is typical of many homes built in Lunenburg County. Rather than being boarded-in in the usual manner, the corner posts were grooved, and solid plank walls, three to four inches thick, were built up with ends of the planks reduced to fit the grooves in the posts. Split hemlock lath was placed on the inside walls and ceilings and they were then plastered.

The cottage was built around a large central flue with five fireplaces. The one in the cellar was lighted in winter during very cold nights to prevent the potatoes and vegetables from freezing. The kitchen fireplace has a built-in oven and provided for all the cooking needs. Three other hearths, one in the dining room, one in the parlour and another upstairs, served to heat the house, although Edward Ross noted in his diary that on cold nights in winter, water often froze in every room.

Mantels, cupboards, chair rails, and baseboards were all painstakingly fashioned by hand with wooden planes, and we can imagine that they were the products of many hours of labor during stormy weather. As the years passed, some of the original work was replaced, but much of it still remains to illustrate the craftsmanship of the pioneer.

Land Clearing

It is often said that there is a right way and a wrong way to do most anything, and the pioneers soon learned that this was true for land clearing. Their first task was to cut the brush, small trees and windfalls. They called this the underwood, and they used an old axe or a brush hook for the job, cutting the material as close to the ground as possible.

When the underwood was all cut and gathered into piles, they were ready to tackle the large trees or heavy wood. The best pine and spruce were felled and the logs rolled aside to be hauled to the mill during the winter. They would provide building material for the house and barn. Some of the remaining trees were cut and saved for firewood and the tall straight poles were reserved for fencing. The rest were cut and left to dry in preparation for burning.

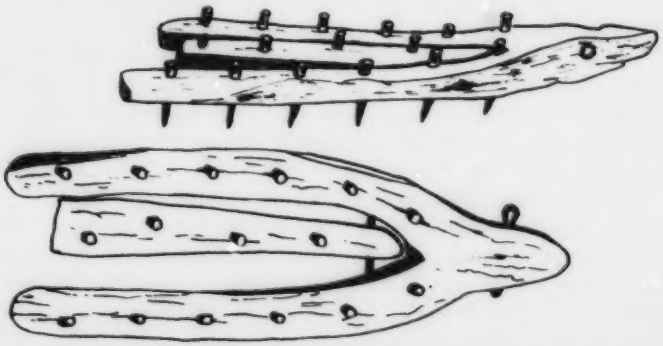
In many areas, it was common practice for a group of neighbors to gather in May or even early June for a piling and burning frolic. Some called it a rolling frolic, because even though the large trees were cut into short lengths they were too heavy to carry and had to be rolled together for burning. The women prepared food and drink while the men labored, and the evening meal was usually followed by music and dancing.

When the large trees were cut down, the choppers were usually very careful to leave the stumps about two feet high but no higher. This enabled their two-wheeled carts to pass over them, but at the same time left the stumps high enough that they could be more easily pulled out by the oxen. In most cases, no attempt was made to remove the stumps for two or three years until they were partially rotted and more easily lifted from the soil. In other parts of Canada, and particularly in southern Ontario, very large and elaborate stump-pulling machines were invented. In Nova Scotia our trees were smaller, and such equipment was not widely used. Instead, a pair of oxen and a chain, and men with poles and cant hooks performed the task.

Planting the Burnt Land

The land was usually burned in May and planting followed immediately. Potatoes were hacked in with a hoe, and the broad-bladed hoe introduced from Europe was soon replaced by locally-made implements with narrow blades since these burnt-land hoes were easier to use among the rocks and roots. Planting the burnt land was hard, slow work. In 1838, six men piled and burned land for eight days, and then with the help of several women they planted 41 bushels of potatoes in seven days. Potatoes, corn, cucumbers and pumpkins were planted in hills, the potatoes were buried with the hoe, but the other seeds were dropped into holes made in the hills with a sharp stick.

Grain and turnip seed was sown broadcast by hand, and was covered with soil by dragging the burnt-land harrow over the ground. This harrow was made from the crotch of a tree, and had one or more movable pieces called hackers on an iron rod inside the crotch. Iron spikes were slanted towards the rear so that they would not catch in roots. The harrow was drawn by oxen and bounced along between the stumps and rocks, its triangular shape enabling it to move over the rough ground without becoming lodged.



Burnt-Land Harrow

Crops on the burnt land were usually good since the virgin soil was relatively rich, and the ashes from the fires provided valuable fertilizer. Much of the natural forest vegetation was either destroyed or failed to survive the open sunlight after

clearing, so that weeds were no problem for a year or two. The usual practice was to continue cropping the burnt land for two or three years until its productivity declined, and then to turn it into rough pasture or seed it down to hay.

This practice of burning new land each year for potatoes and grain persisted in parts of Nova Scotia for many years. Edward Ross noted in his diary in 1838 that: "in new settlements like Sherbrooke it (burnt land) is generally the chief dependence for a crop as, whatever may be the cause, ploughed potatoes seldom turn out well".

When planting was completed, fences were thrown up to protect the crops from the livestock, since cattle and sheep were allowed to roam at will on the forested lands in search of food.

The Ox

Sieur de Poutrincourt brought the first working oxen to Nova Scotia in 1610 and until about 1850, oxen provided the chief source of power on most farms. After that time, horses gradually replaced oxen in the major agricultural districts and in eastern Nova Scotia, but in the southwestern part of the province the use of oxen has continued to the present day.

The Acadians harnessed their cattle with head yokes strapped to the horns, and the German settlers used the same method. British settlers and New Englanders of British origin used the bow yoke which rested loosely on the necks of the oxen. The latter group turned to horses first, and as a result the use of the bow yoke disappeared from the Nova Scotian scene. The use of head yokes persisted, however, in the southwestern region, employed to a large extent by the descendents of the people who brought them here.

Unlike the bow yoke, the head yoke had to be shaped very carefully to fit the head and horns of the oxen. As the animals grew, new yokes had to be made, and a pair of oxen might require as many as four yokes during their lifetime. As a result, yoke-making became an established trade, and every community had several of these skilled craftsmen travelling from farm to farm.

German Style
Head Yoke

front

top

French Style Head
Yoke

front

top

Gallows Type
Head Yoke

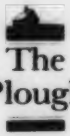
front

The yokemaker often arrived at the farm early in the morning carrying his bag of tools and a round piece of yellow birch. He squared the birch log with an axe and shaped it with a drawknife and chisel. He worked all day, being particularly careful in the later stages to make sure that the yoke fitted perfectly. By four or five o'clock his job was finished, he collected a dollar for his creation, and travelled homeward.

As might be expected, many variations in design appeared over the years, to suit the yokemaker's fancy. Some craftsmen developed a very characteristic style and others used identifying marks so that their yokes could be readily recognized. However, even though there were numerous minor variations, two distinct yoke types persisted throughout the years, the French and the German. The French yoke is wider and flatter, rests more on the neck, and is said to be easier to use. It is often more ornate than the German type which is narrower and is strapped more closely to the horns.

In early days, oxen were of mixed breeds and usually much smaller than they are today. As a result, it was often necessary to use two or even three pair to pull a plough or a heavy load on a wagon. Edward Ross noted that two pair of oxen and a horse were required to haul a load of 56 barrels from New Ross to Chester Basin. Of course, the roads were very bad too, with stumps and rocks and many, many mudholes.

As time went by, farmers took great pride in their oxen and often bred their cattle specifically for the purpose. Many people favored a cross between the white-faced Hereford and the Ayrshire. They felt that the Hereford gave them the size and weight required, while the Ayrshire gave them the spirit necessary for good working oxen. It was a proud farmer indeed who could walk to town ahead of a heavy pair of white-faced oxen, with a bright red yoke, and headpads decorated with woolen tassels and studded with brass. The crack of the leather-sheathed whip and the cries of "Haw, Lion" or "Gee, Bright" were familiar all over the countryside.

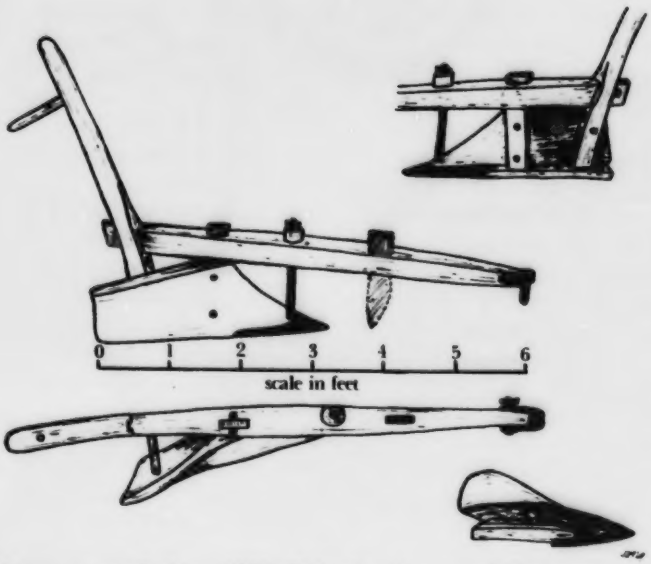


The Plough

In 1819, Captain Ross asked the authorities in Halifax to send a plough to Sherbrooke. Realizing the problems of clearing the burnt land of stumps and stones, they questioned whether he had any land ready for the plough, and we do not know if they complied with his request. If they did, they probably sent him one of the Yorkshire or Rotherham variety, since this was the commonest plough in use in Nova Scotia at the time.

The first ploughs were brought to Nova Scotia in 1610 by Sieur de Poutrincourt, and we suspect they were wheel ploughs since this type was most widely used in France during that period. Primitive swing ploughs were introduced to France from England in the eighteenth century, and they were used here by the Acadians, but probably not until the lack of additional marshland forced them to clear and cultivate upland soils.

The German settlers used a wheel plough in Lunenburg County, and it was identical in design to the ploughs used in



Acadian Swing Plough

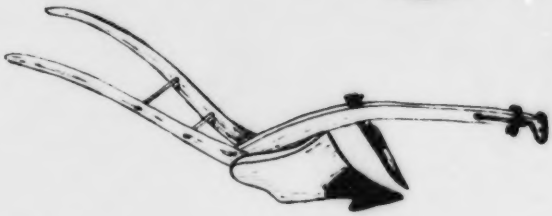
Germany until about 1850. This plough was called a turn-wrest since the mouldboard was detachable and could be used on either side. This same principle was employed in the side-hill ploughs which became so popular in later days.

The Yorkshire or Rotherham plough was patented by Joseph Foljambe and Disney Stanyforth in Yorkshire in 1730. It was one of the earliest plough designs in Britain that had a wide influence throughout Great Britain and North America. It was a swing plough (without wheels) and was made of wood except for the bridle and coulter. The mouldboard was curved and plated with iron.

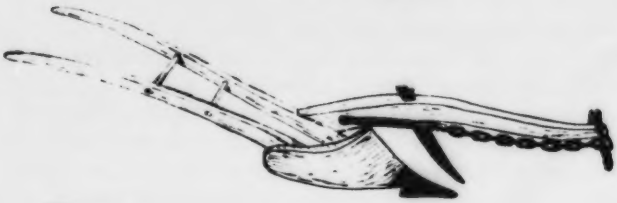
The beam of the Yorkshire plough was attached to the inside of the left stilt (or handle) and resulted in the share and coulter being drawn at an angle to the line of draught. This gave the plough more land, that is, it cut a wider furrow, but it increased the friction tremendously and usually required several pairs of oxen or horses to draw it.

In 1767, James Small of Blackadder Mount in Berwickshire patented an improved plough patterned after the Yorkshire type. He changed the line of draught and thereby reduced friction by making the land side of the plough and the coulter perpendicular. When John Young wrote his *Letters of Agricola* in 1818, he recommended the Small plough as the best available. A number were imported and Nova Scotian

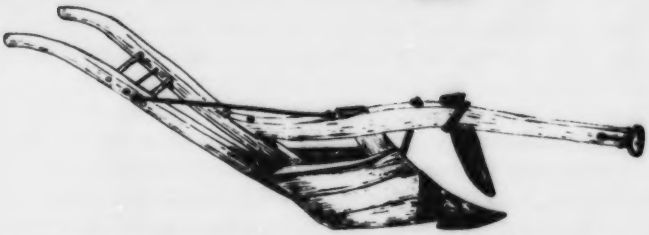
The Lunenburg Turnwrest Plough
1753-1850



Yorkshire Plough
1800



Small's Chain Plough
1820



The Paradise Plough
1850

ploughmakers, particularly in western Nova Scotia began copying the design, changing the shape of the mouldboard to suit local soil conditions.

In 1800, James Wilkie of Uddingston, Lanarkshire, patented a modified version of the Small plough. It featured a convex mouldboard which tended to set the turned furrows on edge and it soon became a favorite among many Scottish ploughmen. The Wilkie plough was first brought to Nova Scotia by the Scottish settlers of Pictou. For many years the iron parts were imported, and the beam and stilts were made here.

The Robert Hunter Hillside Plough
Bridgewater and Lunenburg County
1861

Cast iron ploughs were imported from New England after 1830, and became popular in Nova Scotia for ploughing gardens, even though the soil tended to stick to the mouldboards and had to be scraped off frequently. They were short of beam and handles and could be manoeuvred easily in small fenced gardens.

Both wooden and iron ploughs of Scottish and New England design were made in Nova Scotia from 1819 until after 1900. Many of them were expertly constructed and their design was equal to any of the imported types. However, numerous farmers were convinced that the imports were superior to the local products, and most plough manufactories displayed their own products side by side with implements brought in from the United States and Britain. After 1870, distributors for Ontario manufacturers appeared, and by 1900 local manufacture virtually ceased.

At about the same time, the productivity of the small farms began to decline. Less and less acreage was cultivated each year, and more and more farms became a place to live while the cash income was sought elsewhere. Interest in ploughs declined on these part-time farms when only enough land was turned over each year to provide for a garden and a small piece of oats. When this occurred, the side-hill plough became very popular. It was convenient to use in small gardens and did an acceptable job on land which did not support a heavy sod.

The Golden Harvest

One of the first thoughts of the pioneer farmer was to raise enough wheat for his bread. Imported flour was expensive, and the money to purchase it was scarce. But wheat raising in Nova Scotia was an uncertain undertaking, with weather conditions often preventing proper ripening, and the quality of the crop at other times such that the flour ground from it was of poor quality.

The Lunenburg farmers favored barley and rye, although they often planted wheat with their barley as a mixed grain crop. The Scottish settlers early turned to oats, and in this grain they found a crop much better suited to the Nova Scotian climate. Recognizing this, the government encouraged an increase in oat culture by providing subsidies to assist in the erection of oat mills.

Many persisted in trying to raise wheat, however, despite the difficulties involved. The greatest blow came in 1845 when the wheat midge destroyed crops throughout the province, and continued to cause severe losses until 1849. The wheat midge, *Thecodiplosis mosellana* Gehin, appears to have been introduced from Europe. It laid eggs on the young grain when it was in flower, and the larvae destroyed the kernels of grain as they developed.

Sickle

The pioneer's grain was scattered by hand on the burnt land and covered with soil with the burnt-land harrow, and on particularly rough land with the hoe. When ripe, the grain was harvested with the sickle or reaping hook. The women often helped with this task, either reaping or tying up the sheaves. It was slow, hard work and required 15 to 20 hours for one person to reap an acre.

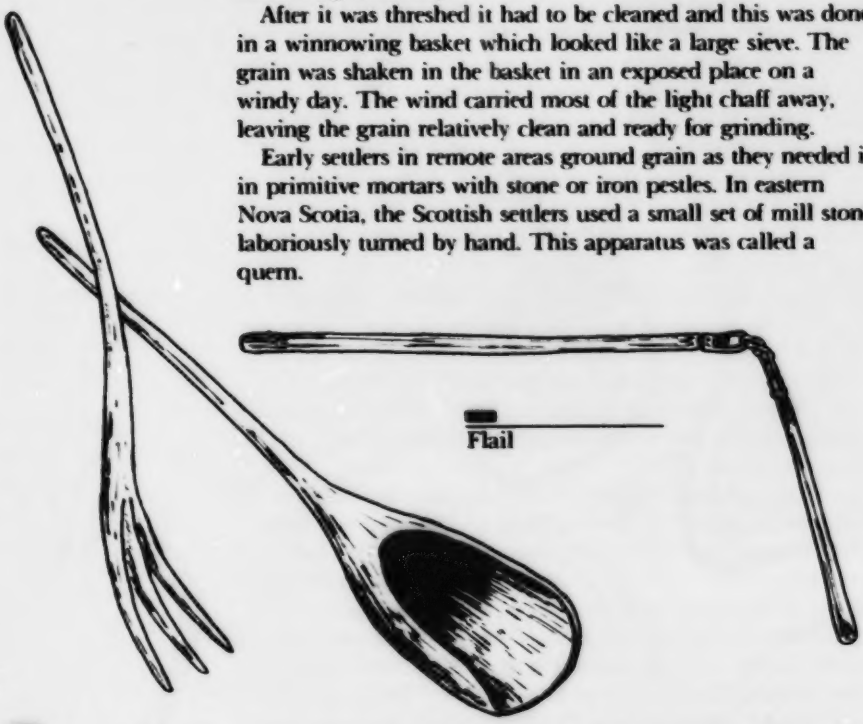
The sheaves of grain were carried to the barn on hand barrows or hauled in two-wheeled carts. Threshing was done with flails on the barn floor, and usually continued throughout most of the winter. The flails were made of two hardwood sticks, with wooden swivels fitted on one end and tied together with a piece of leather or eel skin.

Several sheaves of grain were placed on the floor and beaten with the flails to separate the grain from the straw. The straw was handled with a wooden fork, and the grain, mixed with a

lot of chaff, was shovelled into a box or barrel with a wooden shovel. Two men could thresh a half to three quarters of a barrel of grain a day.

After it was threshed it had to be cleaned and this was done in a winnowing basket which looked like a large sieve. The grain was shaken in the basket in an exposed place on a windy day. The wind carried most of the light chaff away, leaving the grain relatively clean and ready for grinding.

Early settlers in remote areas ground grain as they needed it in primitive mortars with stone or iron pestles. In eastern Nova Scotia, the Scottish settlers used a small set of mill stones laboriously turned by hand. This apparatus was called a quern.



Flail

Shovel and Fork

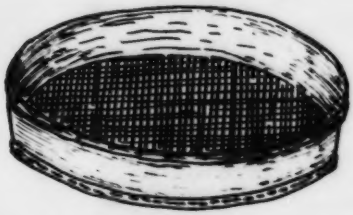
In Sherbrooke, however, as in most settlements, a grist mill was established within a year or two after the founding of the settlement, and the grinding was done by the miller for a share of the grain. The mills were usually quite small and practically all the parts were made by hand on the site. They were located on streams and powered by water wheels.

William Ross, the eldest son of Captain Ross, operated a grist mill in Sherbrooke until about 1850. The stones were shaped from carefully selected local granite, and the frame for the mill was all hand hewn. It was covered with sawn shingles. The dam was built of logs and planks, and great quantities of sphagnum moss were used with soil to make it watertight.

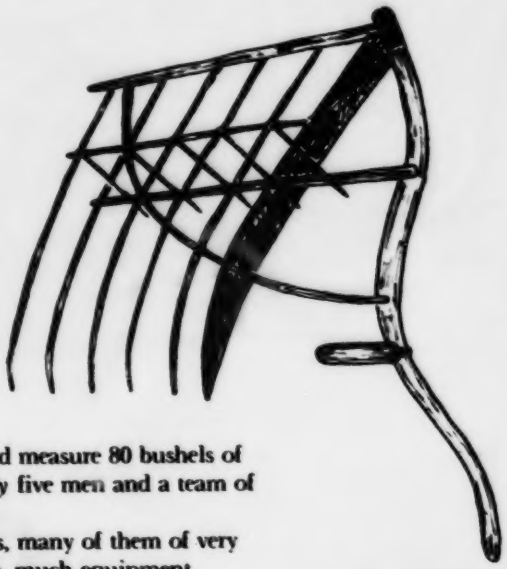
The water supply was not large and as a result the mill seldom began operations until late fall. In January, ice often took the buckets out of the water wheel and forced the mill to close until late March or early April.

About 1840, winnowing machines or fanning mills replaced the winnowing baskets for cleaning grain, and the grain cradle replaced the sickle on some farms. A man with a grain cradle could reap three to five acres of grain in a day, with two or three other people following him to bind the sheaves. In 1837, Zenas Lane of Kentville invented and patented a horse tread mill and a threshing machine, and by 1843 threshing machines were being manufactured in Pictou. In 1860, William McKay of East River in Pictou County built a

Cradle



Winnowing Basket



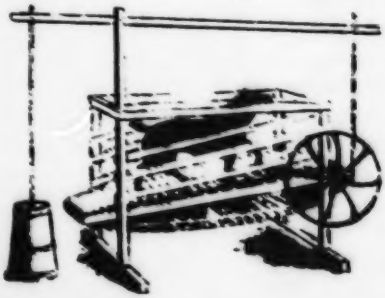
thresher which could thresh, clean and measure 80 bushels of wheat in four hours and required *only* five men and a team of six horses.

Despite the fact that these machines, many of them of very high quality, were manufactured here, much equipment continued to be imported from the New England States and from Great Britain.

The sickle and the grain cradle, the latter never widely used here, were gradually replaced by the reaper and the binder. The reaper was invented by Patrick Bell in Scotland in 1827. Cyrus McCormick patented his model in 1834 and produced it commercially in 1845. A few of these came to Nova Scotia, but it was not until after 1882, when both Massey and Harris began producing their light binders, that the sickle and cradle disappeared from our small farms.

Dog Treadmills
were made in
Stewiacke.

Horse Treadmill
Invented by Zenas Lane
of Kentville.
1837



LANE'S PATENT

Threshing and Winnowing Machine.

THE Subscriber begs to intimate to the inhabitants of Nova Scotia, Cape Breton and P. E. Island, that he has made a number of valuable improvements in his machines, a lot of which will be completed and ready for sale on the first of October, at the following prices viz

Threshing Machines	-	-	-	£17	0	0
do. do.	with one horse power			£40	0	0
do. do.	do.	with Winnowing Machine	-	£45	0	0
Winnowing Machines	-	-	-	£5	0	0

One Machine may be used on eight farms; 10s. to be paid for every additional farm.

Messrs Stiles & Fraser are duly authorized to dispose of Lane's Patent Threshing and Winnowing Machines; and if applied for previous to the close of navigation, the proprietor will forward them to Truro, according to order.

ZENAS LANE.

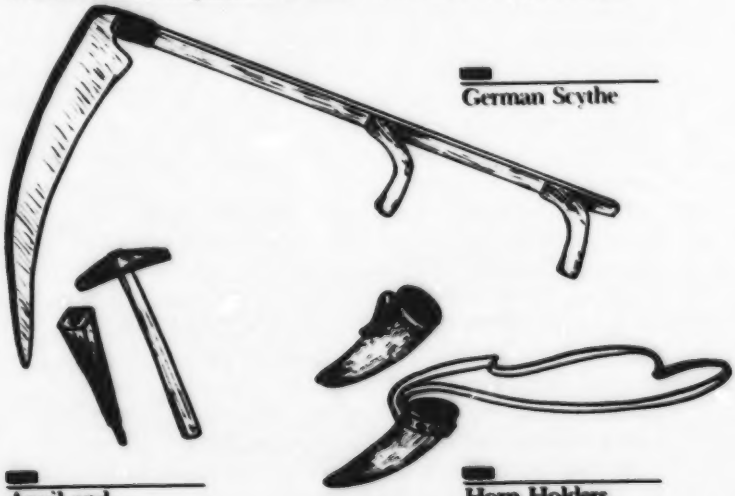
Kentville, Sept. 9th, 1841.

Haymaking

With their hard-won forest clearings planted to potatoes, vegetables and grain, the pioneers sought out the natural meadows to provide winter feed for their cattle. The meadow hay was coarse, but they soon learned the old German custom of chopping it up, scalding it with hot water and allowing it to soak for several hours before feeding. After this treatment, even the coarsest fodder was acceptable to hungry cattle.

Since most natural meadows were quite wet, mowing did not usually begin until mid-August and continued until late September. The meadows were scattered, often at considerable distances from the house, and the men remained away for several days until they had finished their task, sleeping on a pile of hay beneath the stars.

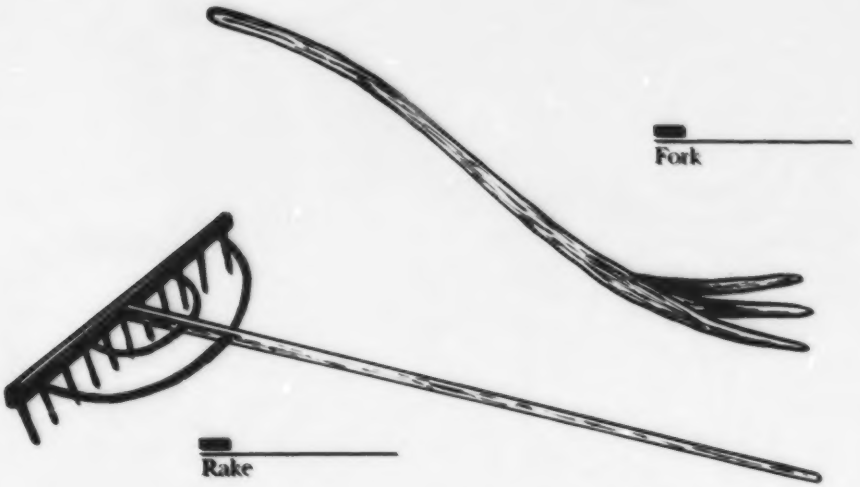
Scythes, imported from England, were purchased in Halifax and were fitted with home-made snaths. It was common practice to mow one meadow, then move to the next and the next. When the last one had been mowed, they returned to the first to begin raking. The hay was gathered with home-made wooden rakes and piled into small cocks with heavy wrought-



German Scythe

Anvil and Hammer

Horn Holders



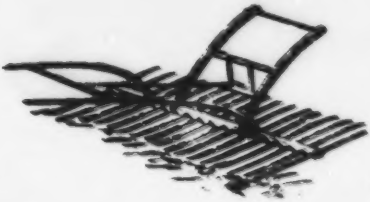
iron forks. Light, steel forks were not common until after 1850. Two poles were slipped under each cock and two men carried the cock to the stack. The hay was carefully stacked to shed the water, and was left on the meadow to be hauled home on the winter's snow.

Even after the burnt land had been cleared of stumps and stones, the hay produced there was of poor quality until the pioneer farmer learned the value of manure, fertilizer and lime. This, combined with the fact that there was always a shortage of hay on the small upland farms, resulted in the meadows retaining an important place in Nova Scotian agriculture for many years.

The upland hay harvest usually began about mid-July and continued until mid-August depending upon the weather. The methods employed were the same as those used in the meadows, except that on the dry land close to the buildings, the hay was carried to the barn on poles or was hauled on two-wheeled carts fitted with racks. After about 1820, four-wheeled wagons replaced the carts. Women and children usually helped with the upland hay, shaking it out to speed curing, and following the wagon to rake the "scatterings".

By 1840, horse-drawn drag rakes were in common use and by 1850 the revolving or flop-over rake greatly reduced the time and labor involved in gathering hay. The wheel rake

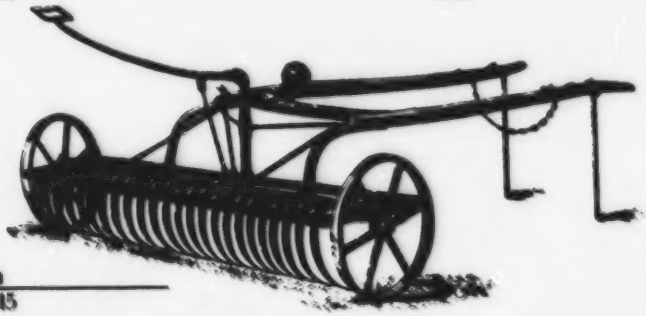
1830



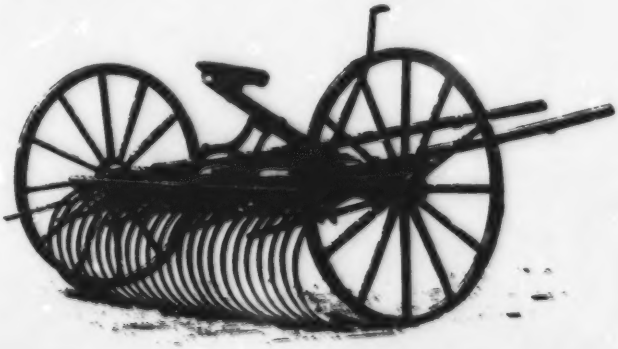
1840

1845

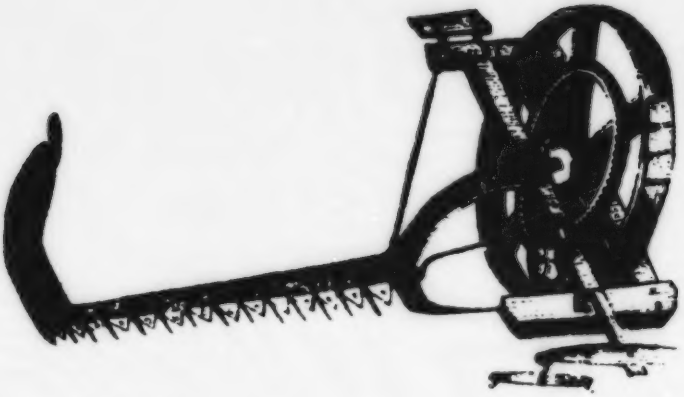
Horse Rakes



1845



1870

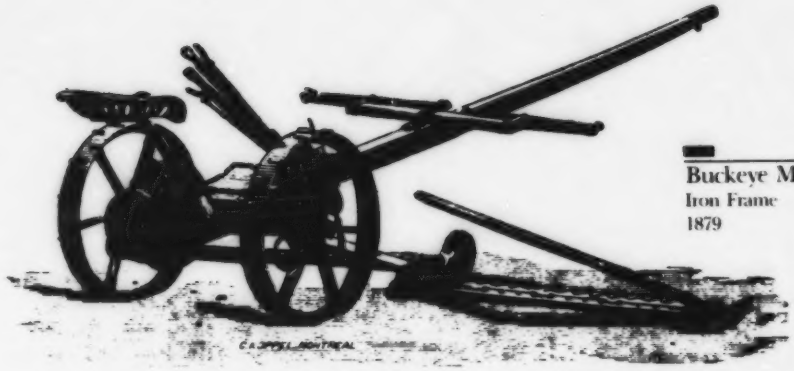


Ketchum's Mower
was the first brought to Nova Scotia.
1853

became popular about 1870, but hand rakes were still employed in the fields to collect every precious wisp of hay.

In 1853, the first mechanical mowing machines were brought to Nova Scotia. They were the single-wheeled Ketchum mowers, and although a vast improvement over the scythe, they were easily upset and therefore dangerous on rough or hilly ground. Shortly thereafter, the two-wheeled models were introduced, and by 1870 most farms were using a Buckeye, a Woods, a Deering Ideal, or one of the other numerous makes of mower on the market.

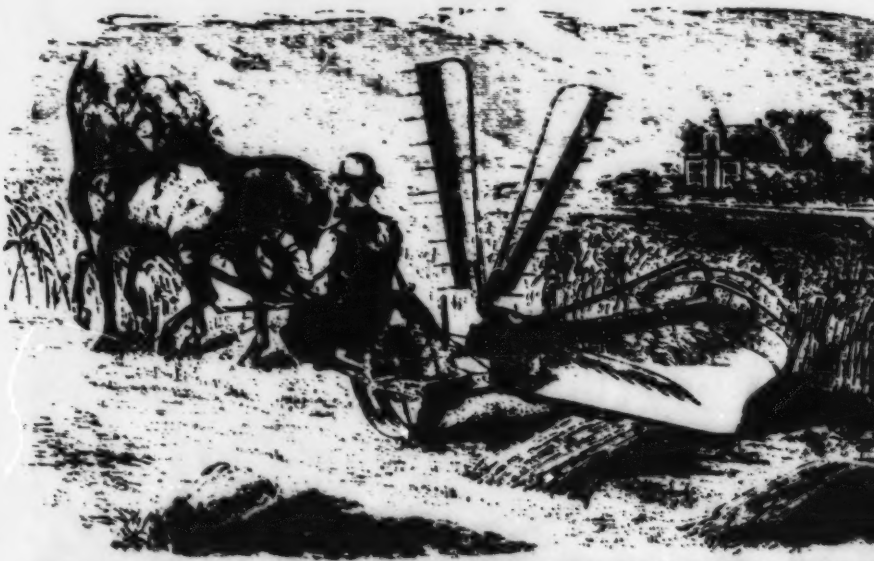
These machines made life easier for the farmer, but at the same time they reduced his labor requirements. Extra sons soon realized they were not needed any longer, since one man and a machine could now do the work which required a half-dozen men just a few years before. In most cases, there was no more land suitable for cultivation, and the sons were forced to look elsewhere for employment. The movement of people away from the farms and out of the province began.



Buckeye Mower
Iron Frame
1879

Buckeye Mower
Wooden Frame
1857

Cossitt's New Light Reaper. Front view.



Cossitt's New Light Reaper.—Twelve Improvements for 1880.—Rear v

The Farm Dairy

The cow was undoubtedly the most valuable animal on the pioneer farm. She provided milk, butter and cheese for the family, and skim milk and buttermilk for the pigs and chickens. Her sons were trained to work under the yoke and provided the chief source of farm power until just before 1900. She provided beef for the table and leather for footwear and harness, and her manure was put back on the land to enrich the soil.

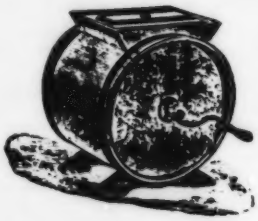
The market for fresh milk was limited previous to 1900, and butter was the chief farm dairy product. A considerable amount of cheese was made in Nova Scotia in early days, but the quality was not particularly high on most farms and the market was limited. There is one record of a farmer from the Annapolis Valley travelling through the woods to Liverpool with a horse and cart load of cheese. In Liverpool, his cheese found a ready market, and he sold his horse and cart as well, and went back to Horton on foot.

DeLaval Cream Separator

To make butter, the cream had to be separated from the skim milk. DeLaval did not invent the cream separator until 1878, so the pioneer simply poured the milk into shallow containers, waited for the cream to rise to the top, and then skimmed it off. Most small farms used earthenware or metal skimming bowls shaped much like a wash basin. Some used wooden troughs made from a short length of log. These had wooden legs and a hole in the bottom fitted with a wooden plug so that the skim milk could be drained off. Some of the larger farms used shallow stone sinks made for this purpose and imported from Great Britain.

The earliest churns were the simple plunger type made of either wood or earthenware. Some preferred a box churn on wooden rockers so that Granny could continue to knit or mend or tend the baby while her foot rocked the churn.

The amount of labor involved in churning butter is indicated by the fact that after 1835 many new churn designs were patented in Nova Scotia, all seeking to reduce the hard work and the time involved. As time passed, the smaller farms favored the small rotary churn, and the larger units turned to



Cylinder Churn

Blanchard Churn

Barrel Churn

the barrel churn rocked on an iron frame, although there were dozens of types on the market.

Butter was sent to market in round wooden boxes and tubs, some holding twenty-five pounds or more. These boxes were often produced by local bands of Micmacs, and they were neatly made and smoothly finished. In later years the butter print was used, and it was designed to produce blocks of butter weighing either one-half or one pound. Some were round and some square, and the carved design on the face of the plunger was often unique and identified the maker. Butter produced in this way was wrapped in paper just as it is today.

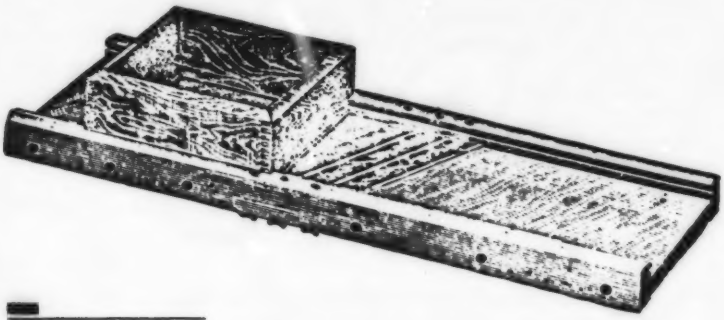
After the railways were built, it was possible for farmers in the remoter districts to ship fresh milk and cream to urban dairies and creameries.

By 1900, the metal creamer or the cream separator had replaced the skimming bowls on the farm, but even though large creameries had been established all over Nova Scotia, many small farms continued to make their own butter until about 1940.

Farm Women

Pioneer farmers sometimes introduced their wives as their "better halves", and it was a well deserved title indeed. We think of the women laboring in the kitchen, preparing food in the heavy iron pots hanging over the fire on the open hearth, but this was really only a small part of their daily routine.

Many women played an important part in accumulating the food as well. They cared for the gardens, helped to harvest the grain, fed the chickens and gathered the eggs, helped to milk the cows, made the butter and cheese, the sausages and head cheese. They picked and preserved wild and cultivated fruits, gathered wild greens and herbs, made mincemeat, sauerkraut and pickled beans.



Kraut Cutter

They not only washed the clothes and cleaned the house, they made the soap they washed with, and gathered the clean sharp sand which they often used to scour their floors and their pots and pans, and they carried endless quantities of water.

Most of the clothing and bedding which they washed so carefully was their own product as well. They carded the wool, swingled and hackled the flax, and spun them into yarn and linen thread. They wove them into cloth and cut and sewed the cloth into dresses, trousers and shirts. They knitted socks, underwear, sweaters, mittens and caps. They wove blankets, sheets and even rugs for the parlour floor.

They stoked the fires and tended the babies, and those with natural skills tended the sick. Doctors were scarce or absent, and the midwives who officiated at births were also called upon to treat any number of the common ills of the time.

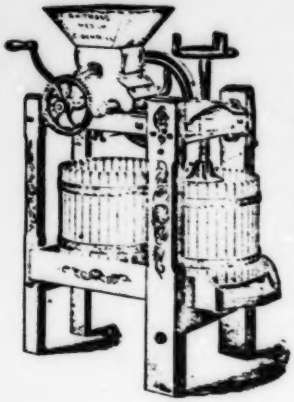
Often women exerted a steadying influence within their families. For example, in his diary, Edward Ross describes Christmas on Ross Farm in 1838. George went to Chester Basin and on Christmas Eve he arrived home with a puncheon of rum. The word spread quickly, and a large number of neighbours soon gathered. At first, all was friendship and fun, but wrestling soon changed to fisticuffs, and a battle royal took place in the kitchen of Rosebank Cottage.

The next day, Christmas, the Ross men nursed their bruises and big heads in solitude, the women had departed early in the morning to spend the day with friends, to give their menfolk a chance to reflect upon their ridiculous behaviour. Edward Ross noted in his diary: "We had not a morsel of Breen nor a Cake nor a Pudding this Christmas for the first time in our lives. In fact it appeared to me to be a dull Christmas altogether".

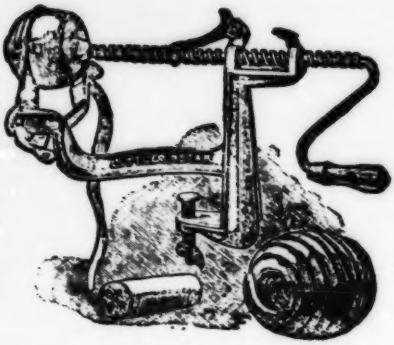
Farm Fruit

When most of us think of fruit growing in Nova Scotia, we think of Annapolis Valley. Sieur de Poutrincourt planted the first fruit trees there in 1610, and the Acadians had extensive orchards of apples, pears, plums and cherries. When the New Englanders replaced the Acadians, they were more interested in potatoes than in fruit, but after their crops were destroyed by blight for four years in succession from 1845 to 1849, they turned to apples as a substitute. But that is a long story in itself, and we are more concerned here with the place of fruit in the life of pioneers throughout the province.

The settlers, from very earliest times, looked to the native fruits for an important part of their food supply. Blueberries, raspberries, blackberries, huckleberries, cranberries and strawberries were all harvested in season. The practice of



Cider Press



Apple Parer

burning land encouraged the growth of blueberries and raspberries in particular, and in most years abundant supplies were available around the forest clearings.

Captain Ross planted apple trees on Ross Farm very shortly after he arrived, and other settlers followed his example. Within a few years most farms had a number of apple and pear trees, and some raised plums, cherries and even peaches. Currant and gooseberry bushes were planted near the house, and vines producing large quantities of small blue grapes were tended with care.

The pioneers learned from the Indians to dry some of the small fruits such as blueberries, but as containers became more readily available making "preserves" became the commonest method of keeping small fruits for the winter. The practice of slicing and drying apples was widespread, and during the sunny fall days many pioneer homes had their outside walls festooned with countless strings of drying apples.

As time went by, many districts in addition to the Annapolis Valley were producing surpluses of tree fruits, the first apples were exported to England in 1847, and apple warehouses appeared here and there. In most of Nova Scotia, however, fruit growing was aimed primarily at feeding the family, and wild fruits continued to provide an important and much-relished food supply.

Wood

Wood played a major part in the life of the pioneer. When he cleared his land, he burned great quantities simply to get it out of his way, but at the same time he saved the best pine and spruce for his home. White pine was the favorite: it grew quite large and provided fine, straight logs clear of knots. It was soft and therefore easy to work with simple tools, but it was strong, easily finished and had excellent lasting qualities.

Spruce was very much like pine, but lighter and stronger and a little harder to work. The large trees were used for building purposes and the smaller ones for farm implements such as wagon ladders and sleigh boxes and for barrel staves. Mature hemlock tended to be brittle and to split easily. It was more difficult to work, and although good hemlock made excellent finished lumber, much of it was shaky and used only for boarding in rough buildings, making split plaster lath, and for planking bridges and dams. Its bark was gathered in hugh quantities for tanning.

The farmer soon learned to identify our native woods and recognized the peculiar qualities of each. He sought the larch or hackmatack where great strength and resistance to water was required, and used it for fence posts, and for knees and timbers in boat building. The gray birch made excellent hoops for barrels which had spruce staves and pine or spruce heads.

Yellow birch, ash and beech were used for tool handles, sleigh runners, wagon axles and frames. Ash was split for fence rails, and all of the hardwoods were prized for winter firewood. The larger trees were cut into four-foot lengths and hauled home on sleighs as "cord wood" or "sleigh wood". The smaller trees were cut and hauled home in tree lengths called "drags".

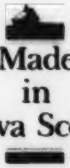
Even the lesser species had their uses: witherod, dogwood and the willows were used to tie up fence rails, and were woven into bushel baskets and eel pots. Poplar, ash and birch were split, squared, pounded and split along the growth rings to make chair seating and baskets.

Tools were simple but effective, and wood-working skills were a natural part of every man's life. Broad axes, pit saws, and the English felling axe felled and shaped the timbers. The

frow and mallet, drawknife and shaving bench made the shingles, clap boards and barrel staves. The chisel, the plane, gimlet, hammer and hand saw just about completed the tool kit, and with these simple tools they built homes, barns, fences, furniture, implements and utensils.

The up-and-down sawmill was set up in most districts within a year or two of the settlement's founding, and it provided timbers and boards. The first circular saws arrived about 1850, and in the early days they were small and used mostly for cut-off saws or for shingle making. The little mills, scattered all over the province, lightened the work of the farmer in preparing building materials, and provided a ready market for his surplus logs. Thus, most farmers became part-time loggers, and wood provided an important part of his cash income.

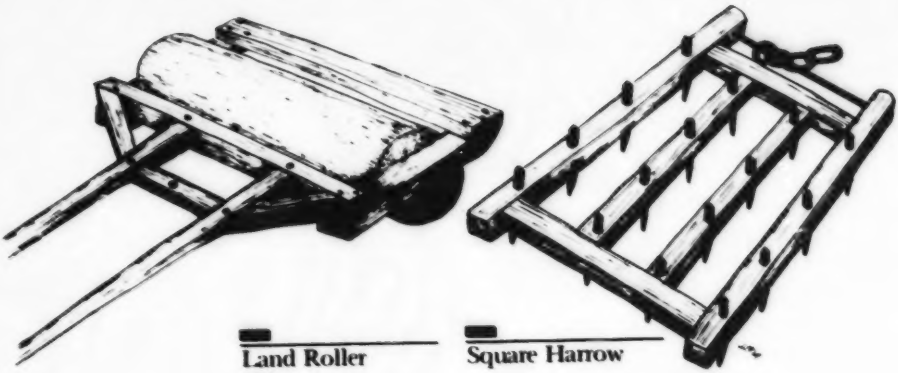
A typical example is that of the man in Caledonia, Queens County, who cut a large pine log, hauled it to the mill to be sawn into boards, hauled the boards to Liverpool, a 30-mile, four-day trip with his oxen, and came home with flour, tea and footwear for his family.



Made in Nova Scotia

Prior to 1800, the farm implements used in Nova Scotia were primitive and consisted mainly of wooden ploughs, burnt-land harrows and two-wheeled carts. The ploughs and harrows were made on the farm and the carts were put together with wheels and axles imported from Great Britain. John Young, in his *Letters of Agricola*, stated that in 1818 there was not one land roller in use in the province.

In 1819, Andrew Malcom applied for a lot of land in Dartmouth to establish a manufactory of carts and ploughs, and this is the first record we have of local manufacture of implements. John Young, and others interested in agriculture, imported the best implements available from England and Scotland and they encouraged local mechanics to copy them. Progress was slow at first, but following the Napoleonic Wars there was a great influx of skilled tradesmen from England



Land Roller
1820

Square Harrow

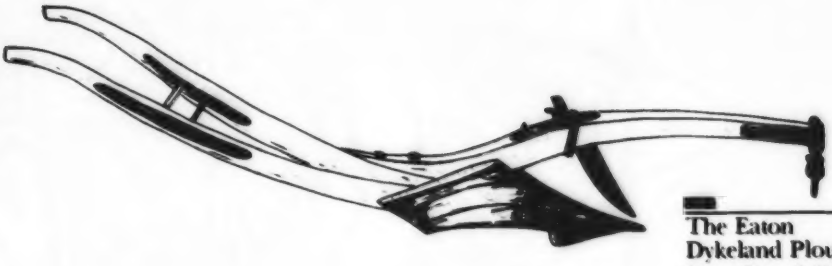
and it was not long before they began to make a considerable impact.

In 1836, John Russell of Pictou was manufacturing ploughs and carts, and the following year Zenas Lane of Kentville manufactured threshing machines and horse treadmills. A strong interest in ploughs persisted, and in 1841 the Cornwallis district offered prizes for the best designs. Three competitors were said to have produced "very handsome and superior ploughs upon which no expense had been spared". The Parrsboro Agricultural Society offered a prize of £3 to its members for the same purpose. By 1845, the Pictou Agricultural Society reported that they were manufacturing threshing mills, straw cutters, Prouty's cast iron ploughs, and iron ploughs on the Scottish model.

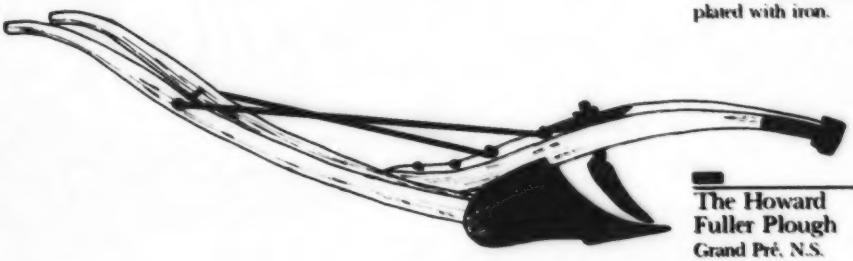
The first foundry in Nova Scotia was established at Wilmot in 1790, and by the middle of the nineteenth century small foundries were found in most towns of the province. These small plants produced a variety of implements such as ploughs, harrows, hay cutters, winnowing and threshing machines, with most combining the skills of iron mongery and woodworking.

The presence of both coal and iron ore in the New Glasgow area resulted in a substantial development in the iron industries there at an early date. In 1883, the first steel ingots produced in Canada were made in Trenton, and from that time until about 1915, New Glasgow was the centre of agricultural implement production in the province.

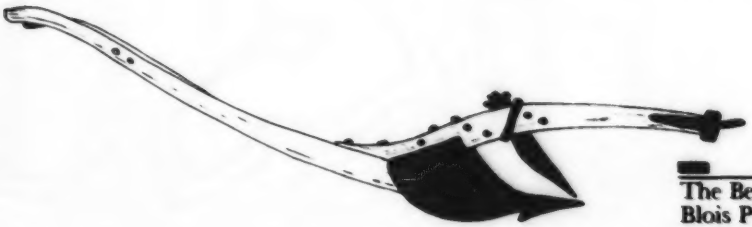
The spring-toothed harrow was invented there by William Patrick McNeil, and in addition to the thousands of harrows sold throughout the Maritimes, teeth were shipped to Ontario



The Eaton Dykeland Plough
Upper Canard, N.S.
Wooden mouldboard, plated with iron.

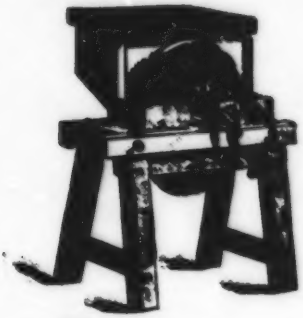


The Howard Fuller Plough
Grand Pré, N.S.
Iron mouldboards.

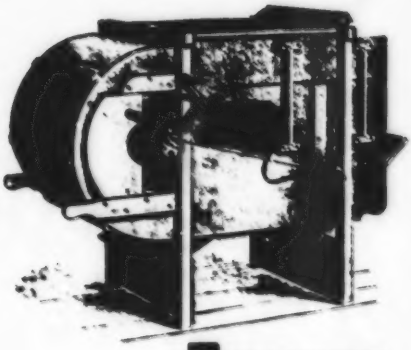


The Benjamin Blois Plough
South Rawdon, N.S.
Iron mouldboards.

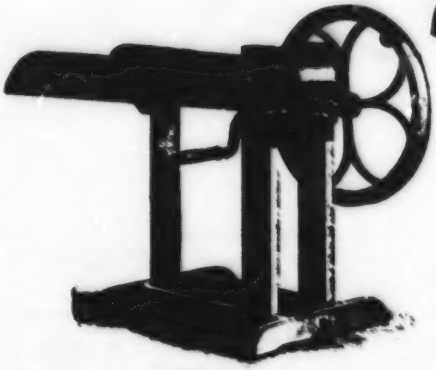
The John Stewart Steel Plough
New Glasgow, N.S.



Turnip Cutter



Winnowing Machine



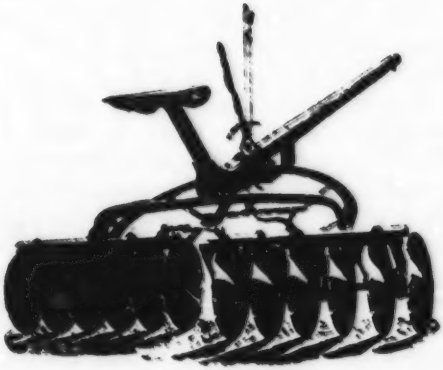
Hay Cutter

Hay Cutter

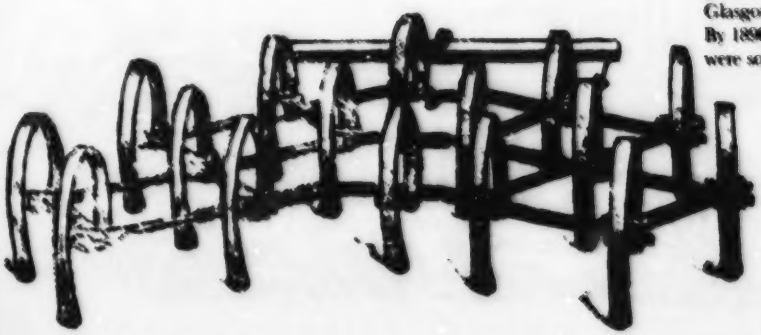
by the freight-car load. Hay rakes, mowing machines, iron and steel ploughs and cultivators were manufactured as well. About 1890, the Munroe Wire Works Ltd. began producing poultry netting, barbed wire, picket wire, plain twist wire and ornamental fencing.

None of these plants, either in New Glasgow or in the rest of Nova Scotia, was particularly large. The markets were very local, in many cases limited to within a 25 to 50 mile radius of the plant. When the railroads were built, the larger firms of Ontario and the United States rapidly established agencies throughout the province, and our small manufactories gradually declined and died.

Iron-Framed Harrows
Replaced those with wooden frames after 1870.



Disc Harrow
Bridgetown Foundry made disc harrows in 1880.



The Spring-Toothed Harrow
was invented and first produced in New Glasgow.
By 1890, over 20,000 were sold.

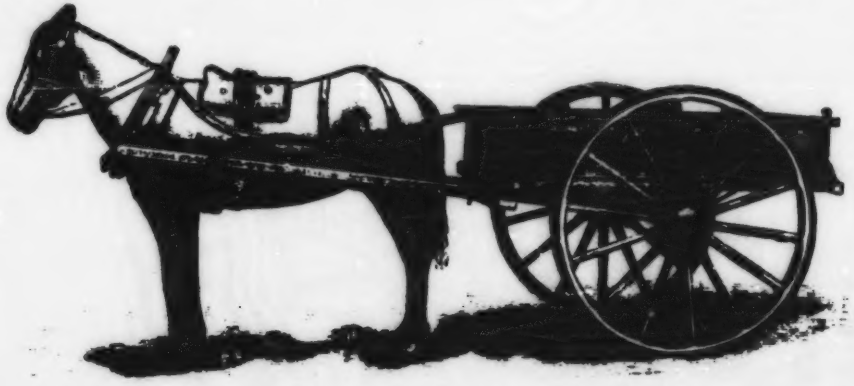
Travel, Transport and Trade

In 1784, there were two roads in use in Nova Scotia, one from Halifax to Windsor and another from Halifax to Truro. By 1815, the Truro road had been extended to Pictou, and from 1820 to 1853 extensions continued on to Sydney in the east and to Annapolis and Yarmouth in the west. Stage coaches operated on these roads, but land travel remained difficult and often very uncomfortable.

Most pioneer farmers did not stray far from home. They went to the nearest village to trade, and occasionally made a trip to Halifax. Travel to Halifax was most often by way of coastal schooner or fishing shallop. The winds controlled the speed of water travel, and in 1838, Edward Ross described a typical trip in which 13 days were required to reach Halifax from Chester Basin. On his return he left Halifax at 7 a.m. and arrived in Chester Basin at 7 p.m. the same day.

A trip to Chester Basin for supplies, a distance of about 15 miles from New Ross, was a major undertaking if a heavy load was involved. It usually meant two days with oxen and cart or oxen and sleigh. Four-wheeled wagons were not used in the province prior to 1800, and for many years after that date, the two-wheeled cart was commoner on most small farms. In winter, the box or cord sled was in common use, but the bob sled was not prevalent until after 1850. When heavy

Farm Cart



Bob Sled

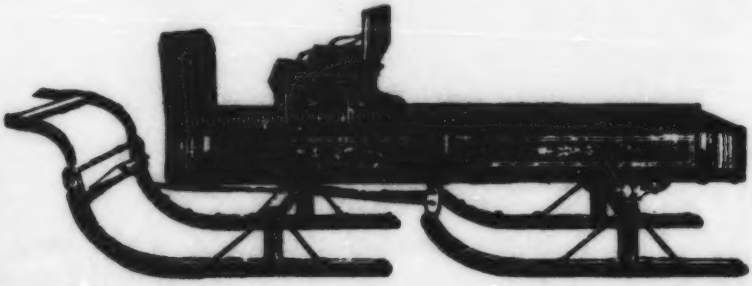
loads were not involved, the light carriage and riding sleigh were employed, but more often travel was on horseback or on foot.

The extension and improvement of roads resulted in rapid development, and by 1861, 10 carriage factories and 162 carriage makers, 173 wheelwrights and 1,518 blacksmiths were operating in Nova Scotia. Sturdy farm wagons, carts and sleighs were made in most every hamlet, often in conjunction with the blacksmith shop. Carriages and driving sleighs were the products of skilled craftsmen and they were usually made in the special carriage factories or shops.

The products of some of the factories were famous for their strength, quality and durability. The Bain wagon, for example, a product of the Nova Scotia Carriage Company in Kentville, became a standard by which all others were judged. In spite of imports from the United States and other parts of Canada, the Nova Scotian carriage and sleigh business flourished until the horse was replaced by the automobile after 1900.

Trade in and out of New Ross in the early days was similar to that in much of the rest of the province. Products shipped out included hay and oats, barrels, staves, butter, hayseed, potatoes, sheep and lambs, fat oxen and pigs, eggs and maple

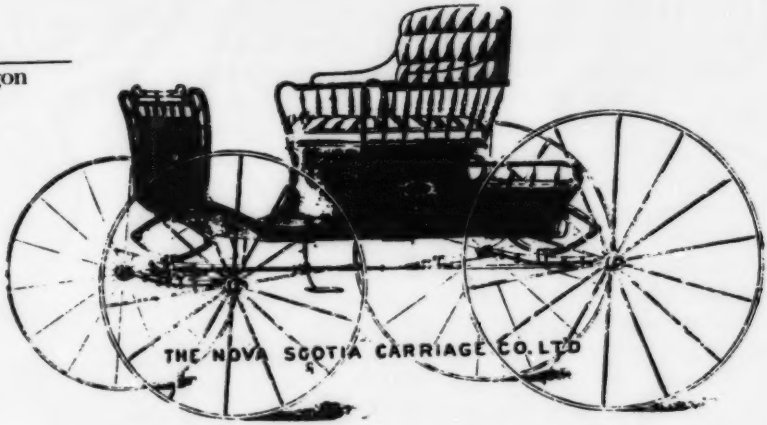
Pung



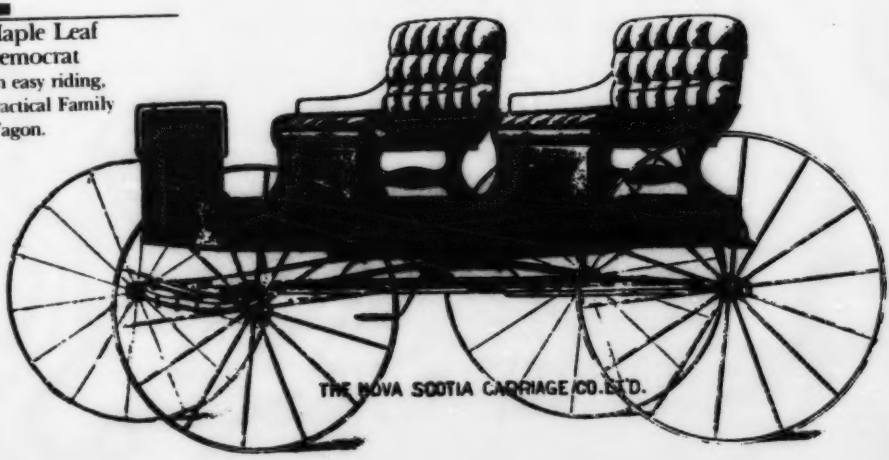
sugar, shingles, lumber and furs. The hay, oats, butter and eggs were sometimes peddled in Chester or Lunenburg, but most commodities were shipped to merchants in Halifax. Barrels were sold at fishing villages as far distant as Prospect and Ketch Harbour, and later apple barrels went to the Annapolis Valley.

Large quantities of flour were brought in from Halifax, along with rum, kegs of tobacco, crockery, dry goods, hardware and leather. The winter's supply of salt fish was purchased in the Basin or at Marriott's Cove.

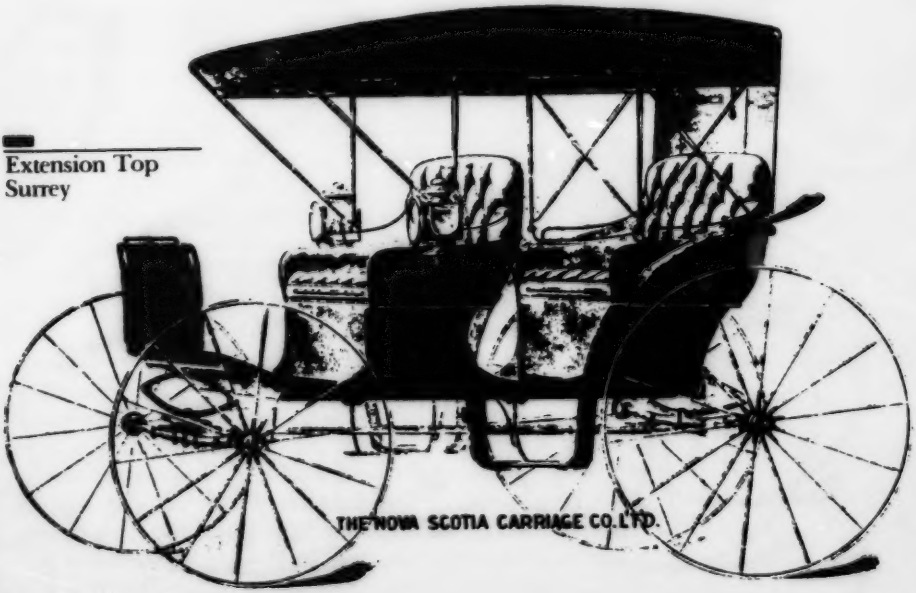
"Bain" Wagon



Maple Leaf Democrat
An easy riding, practical Family Wagon.

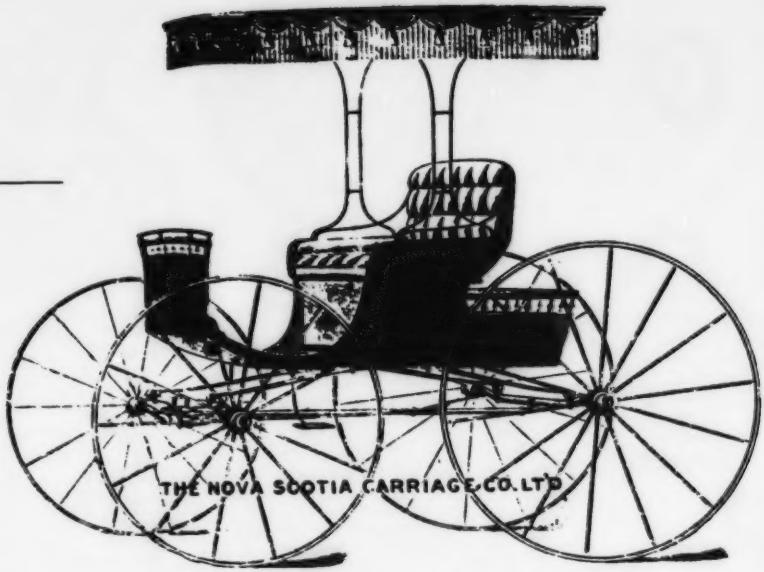


Piano Box Buggy



Extension Top
Surrey

"Bluenose"



Delivery Wagon

Mixed Blessings

The pioneer homestead was designed to be as close as possible to a completely self-sufficient operation. Most of the food, clothing, equipment and utensils were raised and prepared on the farm. A little cloth was brought from Halifax for Sunday clothes, along with some crockery, cooking utensils, and iron ware such as sickles, scythes and edge tools.

The small farm had little difficulty in providing the basic needs of the family, and the small surpluses from field and wood were bartered for the additional essentials and the few minor luxuries. Practically all the work was done by hand, and large families were a blessing, providing the necessary strong arms and backs. This situation persisted until after 1850, in much of rural Nova Scotia.

With the appearance of improved machinery, less labor was required to operate the farms, but more money was needed to purchase the new implements. The surplus sons went away from home to find work for themselves, and production per man on the farm increased markedly. About 1870, the small farm had reached its heyday. Crop and livestock production was at its height, and the woodlands still provided a considerable amount of valuable timber each year. The standard of living had increased somewhat but the requirements of the family were still relatively simple, and could be acquired with a comparatively small amount of cash.

But tastes whetted here and there soon developed into strong appetites. Imported textiles began to replace the homespun woolens and linens. Imported flour was much preferred over the local product. Expensive wagons, carriages and sleighs replaced the homemade carts and sleds. With each substitute, the demands upon the small farm became greater, because all of these things had to come from its soil.

In 1884, Timothy Eaton produced his first mail-order catalogue, and all the wonders of the city were made available to even the remotest farm. The mail-order catalogue became the most popular reading material in rural Nova Scotia. Parents treasured the new editions, children prized the out-of-date volumes, and even when they were several years of age they were still studied in the outhouses of the province.

With the mail-order catalogue came a demand for ready made clothes, patent churns and washing machines, factory-made furniture, and a host of other things largely unknown in the rural areas previously. The soils of the small farms groaned under the load they were asked to carry.

The railroads and improved roads brought the travelling salesmen to the rural districts, and enabled the farm family to travel more easily to urban centres. The knife was replaced by the patent apple peeler, the straw tick with the mattress, every home had to have an organ, and a cast-iron stove. Gas engines replaced the horse treadmill, and a new phenomenon, electricity, was being carried on slim wires from little generators placed on small streams here and there.

The power lines meant electric lights, washing machines, refrigerators, and if the townsfolk enjoyed all these things, why not the rural dweller? The soils of the small farms gave up the struggle, and the gasoline engines which first provided needed power on the farm were now mounted on wheels to propel the people away from the farms. Many used these new vehicles to take them to work in distant places, but they continued to call the farm their home. Others got into the vehicles and drove away, never to return.

The houses sagged with neglect, the spruce and fir crept into the fields, farm lanes grew up in grass and alders. The houses fell into the cellars, the barns collapsed and mouldered away. Deer and porcupine and ruffed grouse tended the old orchards. The winds blew, the sun shone, the rain fell, the trees, shrubs and herbs grew, and the mice and chipmunks played among their roots. The owls hooted at night, the jays screamed by day, and the soil breathed in relief once more. A chapter of our history had been written on the land.

The Ross Farm Story

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